

Work Order ID 53556-*Split*

November 9, 2009 10:11:17 AM

Page 1

Item ID: D2156

Revision ID: C

Item Name: Vent Flange

Start Date: 11/09/09 Start Qty: ~~10.00~~

Required Date: 11/16/09 Req'd Qty: 10.00

Reference:

Accept

Cust Item ID:

Customer:

Approvals:

Process Plan:

QC:

Date:

Date:

Tooling:

SPC (Y/N):

Date:

Date:

Run Start

Stop

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr

Revision Nbr

D2156

Rev C

100



Purchasing

Purchasing

PURCHASING

0.00

Memo

0.00

Issue P/O:

For D2156

Manufacture (Spin) as per Dwg D2156

Possible Supplier: SIEG

Material release note is required

CL 09/11/09

10

110



Packaging

Packaging

Receive & Inspect for Damage & Mat'l Certs

0.00

Memo

0.00

Ensure material certification is attached

Per 7/2

(10)

Pho →

/O:

WORK ORDER CHANGES

DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D2156 PAR #: CA410-25 Fault Category: Eng-design NCR: Yes No DQA: ✓ Date: 10/11/12
 Resolution: Accepted Disposition: use as is QA: N/C Closed: ✓ Date: 10/11/12

NCR: 53556

WORK ORDER NON-CONFORMANCE (NCR)

DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
10/07/05	100	Found at inspection that Din 1.000 measure 0.970" and Din 2.750" measure 2.875" R.C. manufactured. A new method to be drawn up.	B 10.11.05	PER ATTACHED EMAIL, THIS DEVIATION IS ACCEPTABLE AND THE DRAWING WILL BE UPDATE IAW. PART MANUFACTURING PROCESS.	w/m	S 10/11/05	S 10.11.05	S 10/07/05
								S 10/07/05

NOTE: Date & initial all entries

Work Order ID 53556

November 9, 2009 10:11:18 AM

Page 2

Item ID: D2156

Revision ID: C

Item Name: Vent Flange

Start Date: 11/09/09 Start Qty: 10.00

Required Date: 11/16/09 Req'd Qty: 10.00

Reference:

Accept



Setup Start



Stop



Cust Item ID:

Customer:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

120



QC

Quality Control

QC6- Inspect dimensions to drawing

Memo

0.00

0.00

8.00/10.5

(10)

130



Small Fab

Small Fab

Small Fab

Memo

1- Drill holes and cut corner as per Dwg D2156
2- Deburr

0.00

0.00

= 7 m. k w/u/u (IX)

140



QC

Quality Control

QC5- Inspect part completeness to step on W/O

Memo

0.00

0.00

8.00/10.5

(10)

135 water jet

Work Order ID 53556

November 9, 2009 10:11:18 AM

Page 3

Item ID: D2156
Revision ID: C
Item Name: Vent Flange

Accept

Start Date: 11/09/09 Start Qty: 10.00
Required Date: 11/16/09 Req'd Qty: 10.00
Reference:

Cust Item ID:
Customer:

Setup Start
Stop

Approvals: Process Plan: Date: Tooling: Date:
QC: Date: SPC (Y/N): Date:

Run Start
Stop

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

150

Chemical Conversion Coat per QS1005 4.1

0.00

HandFinish

Memo

0.00

10/11/11

1 PR 10-11-11.

Hand Finishing

160

QC3- Inspect Part Finish

0.00

QC

Memo

0.00

Quality Control

170

0.00

Small Fab

Memo

0.00

Small Fab

1- Install inserts as per dwg

10/11/11

8

Work Order ID 53556

November 9, 2009 10:11:18 AM

Page 4

Item ID: D2156

Revision ID: C

Item Name: Vent Flange

Start Date: 11/09/09 Start Qty: 10.00

Required Date: 11/16/09 Req'd Qty: 10.00

Reference:

Accept

Cust Item ID:

Customer:

Setup Start

Stop

Run Start

Stop

Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

180

QC5- Inspect part completeness to step on W/O

0.00

0.00

8/10/11

@

QC

Quality Control

Memo

190

Identify as per dwg & Stock Location:

0.00

0.00

Packaging

Packaging

Memo

PP 63434

10/11/11

200

QC21- Final Inspection - Work Order Release

0.00

0.00

QC

Quality Control

Memo

10/11/11

MF
10-11-11

Picklist Print

November 9, 2009 10:11:16 AM

Page 1

Work Order ID: 53556

Parent Item: D2156RevC

Parent Item Name: Vent Flange




Comments: IPP RevA: revC as per dwg 09.11.09 DD verified by:EC

Start Date: 11/09/09

Required Date: 11/16/09

Start Qty: 10.00

Required Qty: 10.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D2156P 		Purchased	No			110	Each	0.0000	10.0000			
Vent Flange NAS1329A3K80 		Purchased	No			170	Each	153.0000	40.0000			
Insert 												

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

153

11377

50

3154

12

7808

4

9662

87

4 So 10/11/11 (6)



W/O J. S. S.



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO10727**

Purchase Order Date 11/09/09

PO Print Date 11/09/09

Page Number 1 of 1

Order From :

VC-SIE001

SIEG'S MANUFACTURING LTD.
6236 - 205 STREET
LANGLEY, BC V2Y 1N7
CA

FXED

Contact Name

Vendor Phone 604 530 7455

Vendor Fax 604 530 7490

Vendor Account Nbr

Buyer

Chantal Lavoie

Requisition Nbr

Tax Resale Nbr

10127-2607

Terms

Net 30

Currency

CAD

FOB

Ship To :

DART AEROSPACE LTD

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Line Nbr	Reference Revision ID Vendor Part Number	Description/ Mfg ID	Req Date/ Taxable	Req Qty/ Unit of Measure	Ship Method	Unit Price	Extended Price
1	D2156P	Vent Flange	11/16/09 Yes	10.00 Each	FedEx Economy	\$4.5000	\$45.00

Special Inst: AS PER DWG D2156 REV.C
B53556

PO Total:

\$45.00

CERTIFICATE OF CONFORMITY
REQ'D UPON DELIVERY

MATERIAL CERTIFICATION
REQ'D UPON DELIVERY

Change Nbr: 1

Change Date: 11/09/09

No substitution or deviation without
consent.
Certificate of Conformity or Material
Certification required when applicable



Sieg's Manufacturing Ltd. Packing Slip

Metal Spinning & Fabricating

6236 205 Street

Langley, BC, Canada V2Y 1N7

Phone:(604)530 7455 Fax:(604)530-7490

Packing Slip No.:

38042

Date:

06/29/2010

Page:

1

Sold to:		Ship to:	
DART AEROSPACE LTD. 1270 ABERDEEN STREET HAWKESBURY, ONTARIO K6A 1K7		DART AEROSPACE LTD. 1270 ABERDEEN STREET HAWKESBURY, ONTARIO K6A 1K7	
Order No.: 10727		Sold By: KAULBARS, ARLA	
Shipped By:		Ship Date: 06/29/2010	
Tracking No.:			

Item No.	Unit	Description	Quantity
1	Each	D2156P VENT FLANGE	10
2	Each	TOOLING FOR D2156P	1
<div>Comment:</div>			



Sieg's Manufacturing Ltd.

6236 205 Street Langley, B.C. Canada V2Y 1N7

Ph#: (604)530-7455 fax#: (604)530-7490

arla@siegsmfg.com

INSPECTION REPORT

Date: June 29/10
Customer: Dart Aerospace
Packing Slip: 38042

Part#:	Quantity	Material	Check holes	Insp. By.
D2156P	10	6061-0	NA	A

Notes:

Material Certification Attached: ✓

PITTSBURGH, PA DAVENPORT WORKS

We hereby certify that the material covered by this certificate has been inspected with, and has been found to meet, the applicable requirements described therein, including any specifications forming a part of the description and that samples representative of the material met the composition limits and had the mechanical properties shown on the face of this sheet.

Malcolm Murphy

-Director of Manufacturing Davenport Works

Kenton P. Young

Quality Assurance Manager

Ship From: RIVERDALE, IA

1072240	0				
Ship Date	B.I. No.	Invoice No.	Alcoa No.	Item	Part
2009-11-27	4412198	00000	1000148355-3		DS-48355
P.O. No./Govt Contract No.	Customer		Alcoa	Item	
5400033547 Ln#: 3	COPPER & BRASS SAL		G0411044404R02		

Ship To: COPPER & BRASS SALES INC
CRANBERRY IND PARK
102 PARK RD
CRANBERRY TOWNSHIP 16066 PA

Item	Description	Quantity	Unit Price	Total Price
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0.063 IN TK (+.0035 -.0035) X 48.0 IN W (+.125 -.125) X 144.0 IN LN (+.15625 -.15625) CAT X 062876-8 (N) A/T 6061-0 FLAT SHEET MILL FINISH ALFLR01624.
AMS4025 REV L EXC MRK ASTM B209 REV 07
((MARKED)) KRAFT PAPER INTERLEAVED
MAX GROSS SKID WGT: 4000 LB QUAN TOL +/-
30 % CQR 0217986 REV 02 CUST REQ 09-11-18 *** W/E 09-11-21 ***

Num	Package Ticket	Lot	Weight	Quantity	UOM	Inspector	Clock Numbers
1	772881	615405	3648	86	PC	27338	46940
2	772890	615405	3658	86	PC	27338	46940
3	772891	615405	3658	86	PC	27338	46940
4	772904	615405	1917	45	PC	27338	46940
			12881	303			

Notes for COR: 0217986.2

PRODUCT PRODUCED TO THE REQUIREMENTS OF AMS4025 REV L ALSO MEET THE REQUIREMENTS OF AMS-QQ-A-250 11 ORIGINAL REVISION DATED 1997-08-01.

CQR: 0217986.2 -Specification Limits -----

Tmpr C	Dir		UTS	TYS	EL4D
	Long Transv.	Max	KSI	KSI	PCT
		Min	22.0	12.0	
Tmpr T42	Dir		UTS	TYS	EL4D
	Long Transv.	Max	KSI	KSI	PCT
		Min	30.0	14.0	16
Tmpr T62	Dir		UTS	TYS	EL4D
	Long Transv.	Max	KSI	KSI	PCT
		Min	42.0	35.0	10

CERTIFIED INSPECTION REPORT

Alcoa Inc.

PITTSBURGH, PA DAVENPORT WORKS

Ship From: RIVERDALE, IA.

We hereby certify that the material covered by this certificate has been inspected with, and has been found to meet, the applicable requirements described therein, including any specifications forming a part of the description and that samples representative of the material met the composition limits and had the mechanical properties shown on the face of this sheet.

Per:

Malcolm Murphy
Director of Manufacturing Davenport Works

Kenton P. Young
Quality Assurance Manager

1072240	0			
Ship Date	B.L. No.	Invoice No.	Alcoa No.	Item
2009-11-27	4412198	00000	1000148355-3	DS-48355
P.O. No./Govt Contract No.	Customer	Alcoa Item		
5400033547 Ln#: 3	COPPER & BRASS SAL G041104404R02			

CQR: 0217986.2 -Specification Limits (cont.)

Chemical Composition	SI	FE	CU	MN	MG	CR	ZN	TI	Other Each	Other Total	Aluminum
Max	0.8	0.7	0.40	0.15	1.2	0.35	0.25	0.15	0.05	0.15	
Min	0.40		0.15		0.8	0.04					REMAIN

Lot: 615405 - Mechanical, Physical, Metallography, Quantometer Results

Temp	Dir	No->	UTS	TYS	EL4D
0	Long Transv.	2	17.6	7.8	26.5
			17.6	7.5	25.9
T42	Long Transv.	2	36.9	18.4	24
			36.8	18.3	22.6
T62	Long Transv.	2	48.4	41.7	13.6
			48.3	41.4	13.1

Cast Number	Chemical - OES	SI	FE	CU	MN	MG	CR	ZN	TI
H2176035	Actuals	0.64	0.4	0.26	0.07	0.9	0.19	0.05	0.02

This material was melted in the United States or a Qualifying Country [REF DFARS 225.872.1(a)]; it was manufactured in the United States

1 5516499
 TO SIEG KAULBARS
 SIEGS MANUFACTURING LTD
 6236 205 ST
 LANGLEY BC V2Y1N7

DATE: 29 June 2010

TEL: 6045307455

FAX: 6045307490



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 (required)

Email address: _____ Job title: _____

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2. What is the primary or MAIN business activity at this location? PLEASE "✓" ONE ONLY

MANUFACTURING		NON-MANUFACTURING
<input type="checkbox"/> 311 Food	<input type="checkbox"/> 327 Nonmetallic Mineral	<input type="checkbox"/> 21 Mining
<input type="checkbox"/> 312 Beverage & Tobacco	<input type="checkbox"/> 331 Primary Metal	<input type="checkbox"/> 221 Utilities
<input type="checkbox"/> 313 Textile Mill	<input type="checkbox"/> 332 Fabricated Metal	<input type="checkbox"/> 23 Construction
<input type="checkbox"/> 314 Textile Product Mills	<input type="checkbox"/> 333 Machinery	<input type="checkbox"/> 42 Wholesale Trade
<input type="checkbox"/> 315 Apparel	<input type="checkbox"/> 334 Computer & Electronics	<input type="checkbox"/> 48 Transportation
<input type="checkbox"/> 316 Leather	<input type="checkbox"/> 335 Electrical Products	<input type="checkbox"/> 49 Warehousing
<input type="checkbox"/> 321 Wood Product	<input type="checkbox"/> 336 Transportation Equipment	<input type="checkbox"/> 517 Telecommunications
<input type="checkbox"/> 322 Paper	<input type="checkbox"/> 337 Furniture	<input type="checkbox"/> 541330 Engineering Services
<input type="checkbox"/> 323 Printing	<input type="checkbox"/> 339 Other Mfg	<input type="checkbox"/> 611 Educational Service
<input type="checkbox"/> 324 Petroleum & Coal		<input type="checkbox"/> 62 Health Care
<input type="checkbox"/> 325 Chemical		<input type="checkbox"/> 92 Public Administration
<input type="checkbox"/> 326 Plastics & Rubber		<input type="checkbox"/> Other (please specify)

3. Which of the following products or services do you intend to purchase in the next 6 months?
 Check all that apply.

<input type="checkbox"/> 1 Coated Abrasives	<input type="checkbox"/> 8 Press Brakes	<input type="checkbox"/> 15 Horizontal Machining Centres
<input type="checkbox"/> 2 Jigs & Fixturing	<input type="checkbox"/> 9 Welding Electrodes	<input type="checkbox"/> 16 Laser Cutting Machines
<input type="checkbox"/> 3 Magnetic Filtration	<input type="checkbox"/> 10 Cutting Tools - Turning	<input type="checkbox"/> 17 Financing-Consulting Services-Venture Capital
<input type="checkbox"/> 4 Punch Presses/Shears	<input type="checkbox"/> 11 Thread Mills	<input type="checkbox"/> 18 Gases
<input type="checkbox"/> 5 Air Oil Presses	<input type="checkbox"/> 12 Ironworking Band Saws	
<input type="checkbox"/> 6 Cutting Tools	<input type="checkbox"/> 13 Hitching & Punching	
<input type="checkbox"/> 7 Hole Saws and Cutters	<input type="checkbox"/> 14 Tool Presetters	

FAX YOUR COMPLETED FORM TO 905-841-4357

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Eric Downing

From: David Shepherd [dshepherd@dartaero.com]
Sent: November 3, 2010 11:11 AM
To: 'Marc Bellavance'
Cc: 'Mike Petsche'; 'Eric Downing'; 'Jason Murdoch'
Subject: RE: D2156 Vent Flange (Ref. D206-575-011)

REFERENCE ONLY

Proceed with the dwg change.

David

From: Marc Bellavance [mailto:mbellavance@dartaero.com]
Sent: Wednesday, November 03, 2010 8:18 AM
To: 'David Shepherd'
Cc: 'Eric Downing'; 'Jason Murdoch'; 'Mike Petsche'
Subject: RE: D2156 Vent Flange (Ref. D206-575-011)
Importance: High

David,

Eric Downing and I have verified the fit of a Sceet 12 with the flange and we don't see a problem using the spun part which P/N is D2156.

Marc Bellavance
Technical/Shop Support
DART aerospace Ltd.

Tel: 613-632-5200 Ext. 240
 Cel: 613-676-0992
 Fax: 613-632-9311
 E-mail: mbellavance@dartaero.com
 Web: www.dartaero.com



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From: David Shepherd [mailto:dshepherd@dartaero.com]
Sent: November 2, 2010 6:45 PM
To: 'Marc Bellavance'
Cc: 'Eric Downing'; 'Jason Murdoch'; 'Mike Petsche'
Subject: RE: D2156 Vent Flange (Ref. D206-575-011)

Marc,

I don't have a problem with the change as long as the part will function in service. In fact, I believe this is what is meant by Jim's handwritten note, which says "Make from D2000 aspirator". Will the part mate properly with the required hoses if its made to the new dimensions? What is the p/n of the spun part in the photograph?

David

05/11/2010

From: Marc Bellavance [mailto:mbellavance@dartaero.com]
Sent: Tuesday, November 02, 2010 7:39 AM
To: 'David Shepherd'
Cc: 'Eric Downing'; 'Jason Murdoch'
Subject: D2156 Vent Flange (Ref. D206-575-011)
Importance: High

REFERENCE ONLY

David,

I inherited a W/O here for D2156 Vent Flange dated... 11/09/09... We need to ship qty(1) D206-571-011 Heater soon and the part in question is not conforming to the drawing as follows:

1. Drawing specifies a welded assembly, we have a spunned part which requires drilling of holes and the flange has to be cut to shape on drawing;
2. The major ID is $\varnothing 2.875$ " instead of $\varnothing 2.750$ ";
3. The height of the sceet connection is 0.970" instead of 1.000".

The reason to have the part spunned is to reduce cost so manufacturing would like to have the drawing revised accordingly as well as authorization to use the non-conforming parts to complete the PO and ship on time.

Marc Bellavance
Technical/Shop Support
DART aerospace Ltd.

Tel: 613-632-5200 Ext. 240

Cel: 613-676-0992

Fax: 613-632-9311

E-mail: mbellavance@dartaero.com

Web: www.dartaero.com



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Version: 8.5.449 / Virus Database: 271.1.1/3233 - Release Date: 11/02/10 07:34:00

05/11/2010